

WHAT IS CLAIMED IS:

1. An isolated WISP-1 antagonist which inhibits or neutralizes induction or secretion of HAS2, HA, CD44 or RHAMM by native WISP-1 polypeptide in at least one type of mammalian cell, said antagonist being selected from the group consisting of an anti-WISP-1 antibody, a WISP-1 immunoadhesin and a WISP-1 variant.
2. The antagonist of claim 1, wherein said antagonist comprises an anti-WISP-1 antibody.
3. The antagonist of claim 2, wherein said anti-WISP-1 antibody binds native human WISP-1 polypeptide comprising amino acids 23-367 of Figures 9A-9C (SEQ ID NO:1) or one or more domains of WISP-1 polypeptide comprising amino acids encoded by the sequences of SEQ ID NO:3, 4, 5, 6, 7, 8, 9, 10 or 11.
4. The antagonist of claim 2 or 3, wherein said anti-WISP-1 antibody is a chimeric, humanized or human antibody.
5. The antagonist of claim 1, wherein said antagonist comprises a WISP-1 immunoadhesin.
6. The antagonist of claim 5, wherein said antagonist comprises a human WISP-1 sequence fused to a Fc region of an immunoglobulin.
7. A composition comprising the antagonist of any of Claims 1-6 and a carrier.
8. The composition of Claim 7 wherein said carrier is a pharmaceutically-acceptable carrier.
9. A method of inhibiting or neutralizing WISP-1 induction or secretion of HAS2, HA, CD44 or RHAMM in mammalian cells, comprising exposing said mammalian cells to an effective amount of WISP-1 antagonist, wherein said WISP-1 antagonist is selected from the group consisting of
- d) a WISP-1 immunoadhesin;

- e) a WISP-1 polypeptide linked to a nonproteinaceous polymer selected from the group consisting of polyethylene glycol, polypropylene glycol, and polyoxyalkylene;
f) a WISP-1 antibody; and
5 d) a WISP-1 variant.

10. The method of claim 9, wherein said WISP-1 immunoadhesin comprises a WISP-1 sequence fused to a Fc region of an immunoglobulin.

- 10 11. The method of claim 9, wherein said anti-WISP-1 antibody binds native human WISP-1 comprising amino acids 23-367 of Figures 9A-9C (SEQ ID NO:1) or one or more domains of WISP-1 polypeptide comprising amino acids encoded by the sequences of SEQ ID NO:3, 4, 5, 6, 7, 8, 9, 10 or

- 15 12. The method of claim 9 or 11, wherein said anti-WISP-1 antibody is a chimeric, humanized or human antibody.

13. The method of claim 9, wherein said mammalian cells comprise cancer cells.

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14. The method of claim 13, wherein said mammalian cells comprise colon or colorectal cancer cells, breast cancer cells, lung cancer cells or brain cancer cells.

- 25 15. A method of treating cancer in a mammal, comprising administering to said mammal an effective amount of WISP-1 antagonist, wherein said antagonist is selected from the group consisting of an anti-WISP-1 antibody, a WISP-1 immunoadhesin and a WISP-1 variant.

- 30 16. The method of claim 15, wherein said cancer comprises colon or colorectal cancer cells, breast cancer cells, lung cancer cells, or brain cancer cells.

- 35 17. The method of claim 15, wherein said antagonist inhibits or reduces cancer cell growth or metastasis.

18. The method of claim 15, wherein said anti-WISP-1 antibody binds native human WISP-1 comprising amino acids 23-367 of Figures 9A-9C (SEQ ID NO:1) or one or more domains of WISP-1 polypeptide comprising amino acids
40 encoded by the sequences of SEQ ID NO:3, 4, 5, 6, 7, 8, 9, 10 or

19. The method of claim 15 or 18 wherein said anti-WISP-1 antibody is a chimeric, humanized or human antibody.

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20. The method of claim 15, wherein chemotherapy, radiation, prodrug, cytotoxic agent, growth inhibitory agent, or cytokine is also administered to said mammal.

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21. The method of claim 15 wherein said antagonist wherein said antagonist inhibits or neutralizes induction or secretion of HAS2, HA, CD44 or RHAMM by native human WISP-1 polypeptide in at least one type of mammalian cell.

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22. A monoclonal antibody comprising the 3D11, 11C2, 9C10, 5D4, or 9C11 antibody secreted by the hybridoma deposited with ATCC as accession number PTA-4624, PTA-4628, PTA-4626, PTA-4625, or PTA-4627, respectively.

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23. A monoclonal antibody which binds to the same epitope as the epitope to which the 3D11, 11C2, 9C10, 5D4, or 9C11 monoclonal antibody produced by the hybridoma cell line deposited as ATCC accession number PTA-4624, PTA-4628, PTA-4626, PTA-4625, or PTA-4627, respectively, binds.

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24. The hybridoma cell line which produces monoclonal antibody 3D11, 11C2, 9C10, 5D4, or 9C11 produced by the hybridoma cell line deposited as ATCC accession number PTA-4624, PTA-4628, PTA-4626, PTA-4625, or PTA-4627, respectively.

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25. An isolated anti-WISP-1 antibody, comprising an antibody which binds to WISP-1 polypeptide and competitively inhibits binding of the monoclonal antibody 3D11, 11C2, 9C10, 5D4, or 9C11 produced by the hybridoma cell line deposited as ATCC accession number PTA-4624, PTA-4628, PTA-4626, PTA-4625, or PTA-4627, respectively, to said WISP-1 polypeptide.

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26. The antibody of claim 25 which is a chimeric, human or humanized antibody.

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27. A chimeric anti-WISP-1 antibody which specifically binds to WISP-1 polypeptide and said antibody comprises a sequence derived from the 3D11, 11C2, 9C10, 5D4, or 9C11 monoclonal antibody produced by the hybridoma cell line deposited as ATCC accession number PTA-4624, PTA-4628, PTA-4626, PTA-4625, or PTA-4627, respectively.

28. The antibody of claim 27 wherein said derived sequence is the variable or hypervariable region of the 3D11, 11C2, 9C10, 5D4, or 9C11 monoclonal antibody.

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29. The WISP-1 antagonist or antibody of any of the preceding claims wherein said antibody is an anti-WISP-1 antibody linked to one or more agents selected from the group consisting of non-proteinaceous polymer, cytotoxic agent, enzyme, radioisotope, fluorescent compound, and chemiluminescent

10 compound.

30. The method of claim 16, wherein said antagonist inhibits or reduces lung cancer cell metastasis at a site in the mammal secondary or different from the primary lung tumor site in the mammal.